

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (currently amended) A method for tuning a laser, comprising the steps of:
positioning a gas cell containing gas with individual vibrational-rotation line spectra inside a tunable laser cavity having a resonance wavelength; and
employing a coarse wavelength tuning means to position the cavity resonance wavelength between adjacent absorption lines of said gas; and
whereby operating said laser operates at an absorption minimum that occurs between said absorption lines;
whereby the laser wavelength is locked to an absolute wavelength defined by the gas;
whereby maximum absorption bands in said gas act as filters for laser wavelength output;
and
whereby said laser does not require means for fine wavelength tuning.
2. (original) The method of claim 1, further comprising the step of using an external tuning means to tune the laser to within a few nanometers of the minimum absorption wavelength so that it lases at the minimum spectral absorption lines where said laser cavity has maximum gain.
3. (currently amended) A method for tuning a laser that does not require means for fine wavelength tuning, comprising the steps of:
positioning a gas cell containing gas with individual vibrational-rotation line spectra outside a tunable laser cavity having a resonance wavelength; and
positioning the cavity resonance wavelength between adjacent absorption lines of said gas; and
whereby operating said laser operates at an absorption minimum that occurs between said absorption lines; and
whereby the laser wavelength is locked to an absolute wavelength defined by the gas.
4. (original) The method of claim 3, wherein the step of positioning the cavity resonance wavelength between adjacent absorption lines of said gas includes using coarse wavelength tuning means.

5. (original) The method of claim 4, further comprising the step of using an external tuning means to tune the laser to within a few nanometers of the minimum absorption wavelength so that it lases at the minimum spectral absorption lines where said laser cavity has maximum gain.

6-13. (canceled).